Destination Server 170

Intranet 150

Home Agent 160

Corporate Firewall 152

Internet 140

Foreign HAT/Proxy 132

Intranet 130

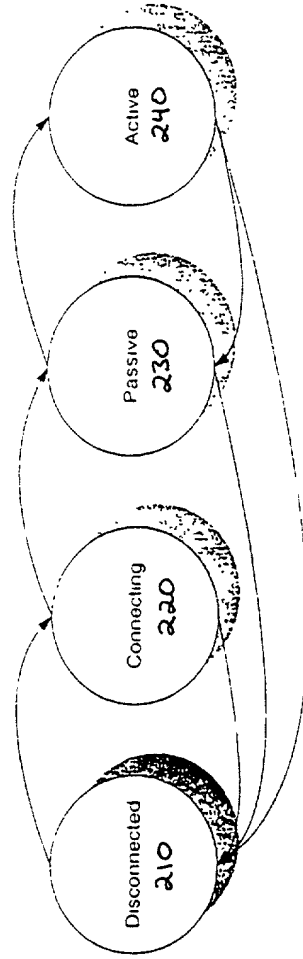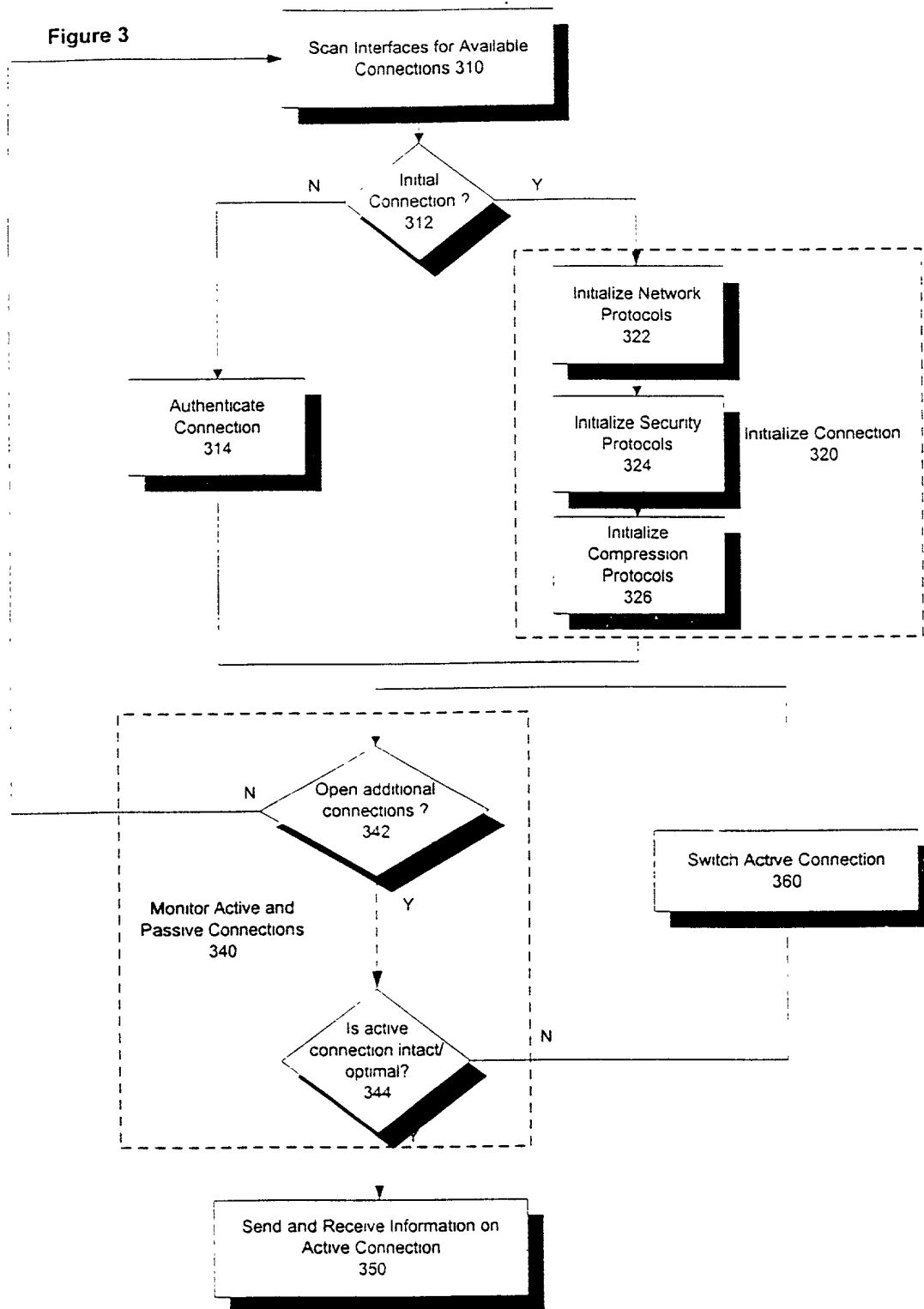Tower

Tower

118

116

114

120

Mobile Device 110

FIG. 1

Figure 2
The tunnel state machine

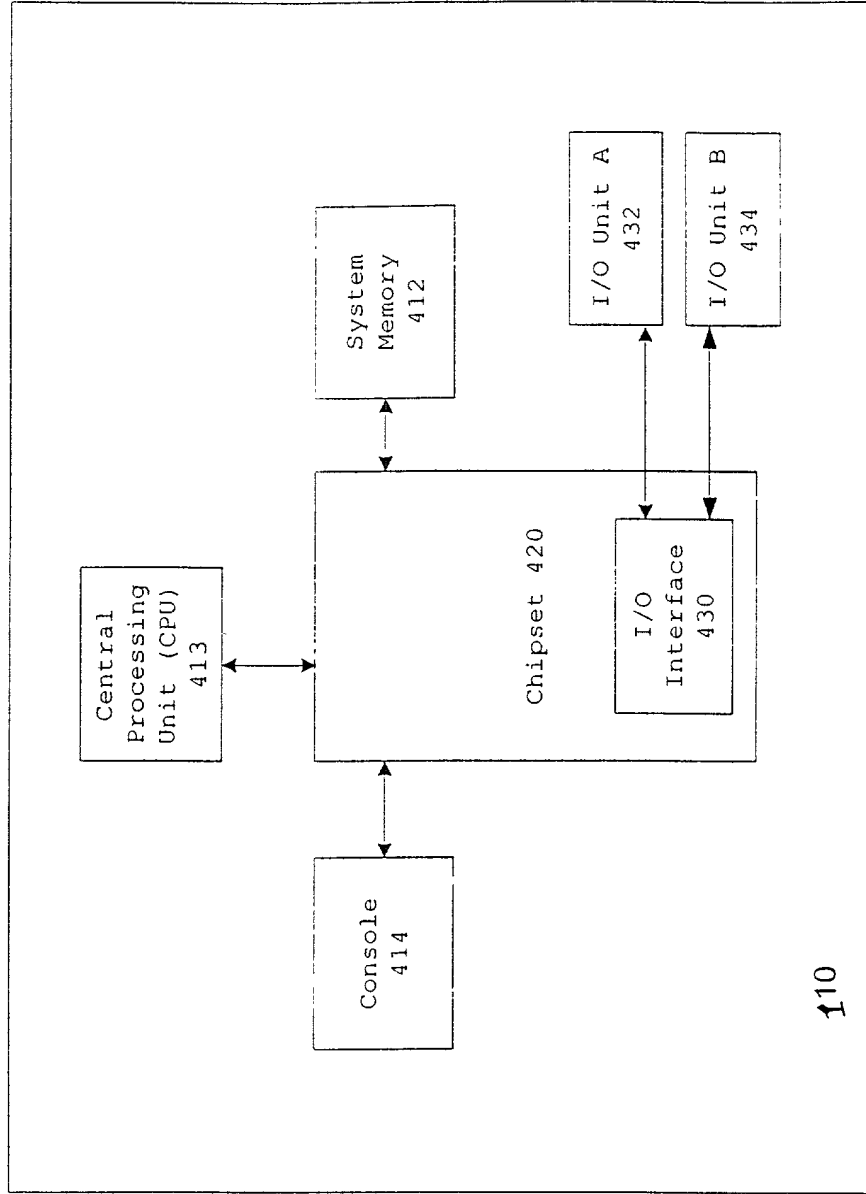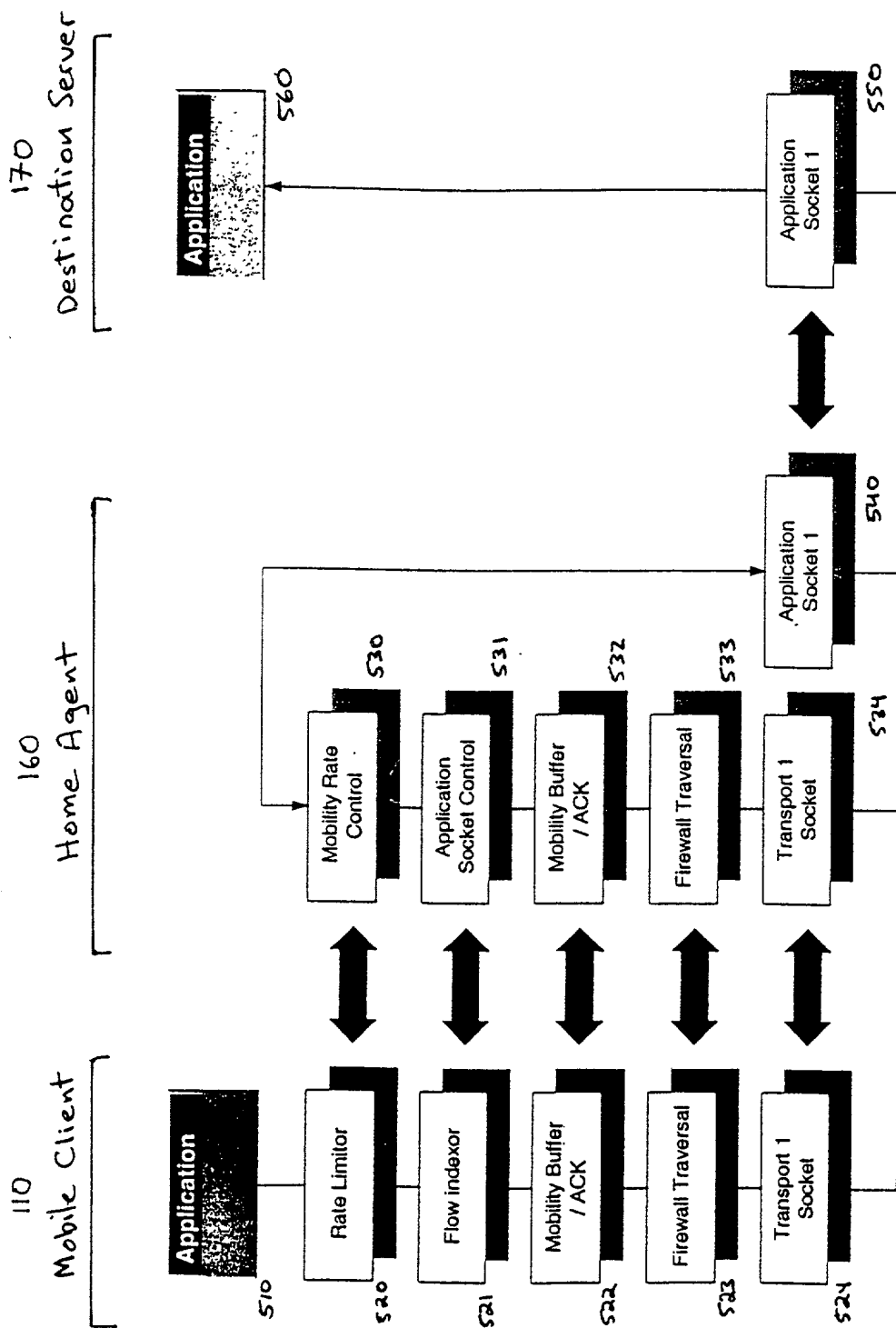Disconnected 210

Connecting 220

Passive 230

Active 240

Figure 3

Scan Interfaces for Available Connections 310

Initial Connection ? 312

N — Authenticate Connection 314

Y

Initialize Connection 320

Initialize Network Protocols 322

Initialize Security Protocols 324

Initialize Compression Protocols 326

Monitor Active and Passive Connections 340

Open additional connections ? 342

N

Y

Is active connection intact/ optimal? 344

N

Switch Active Connection 360

Send and Receive Information on Active Connection 350

Central Processing Unit (CPU) 413

Console 414

System Memory 412

Chipset 420

I/O Interface 430

I/O Unit A 432

I/O Unit B 434

110

FIG. 4

Figure 5
The Stack

170
Destination Server

160
Home Agent

110
Mobile Client

Application — 560

Application Socket 1 — 550

Application Socket 1 — 540

Mobility Rate Control — 530
Application Socket Control — 531
Mobility Buffer / ACK — 532
Firewall Traversal — 533
Transport 1 Socket — 534

Application — 510

Rate Limitor — 520
Flow indexor — 521
Mobility Buffer / ACK — 522
Firewall Traversal — 523
Transport 1 Socket — 524

Figure 6

The Client Side

Figure 7
The Server side